MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CODE: (IS)

SPECIAL PROVISION NO. 907-503-2

DATE: 01/10/2012

SUBJECT: Replacement of Concrete Pavement

Section 907-503, Replacement of Concrete Pavement, of the 2004 Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-503.01--Description</u>. Delete the paragraph of Subsection 503.01 on pages 329 and 330, and substitute the following.

This work consists of replacing continuously reinforced concrete pavement (CRCP), jointed reinforced concrete pavement (JRCP), or plain jointed concrete pavement (JCP) and the removal and replacement of base materials at locations designated on the plans or as determined by the Engineer, all in accordance with the plans and specifications.

<u>907-503.03--Construction Requirements</u>. Delete the title of Subsection 503.03.2.2 on page 330 and substitute "Jointed Reinforced Concrete Pavement (JRCP)".

Delete the title of Subsection 503.03.2.3 on page 330 and substitute "Continuously Reinforced Concrete Pavement (CRCP)".

After Subsection 503.03.2.3 on page 331, add the following.

<u>907-503.03.2.4--Plain Jointed Cement Concrete Pavement (JCP).</u> The removal of existing plain concrete pavement shall be accomplished by sawing the full thickness of the pavement along the edge of the repaired areas as shown on the plans and/or as directed by the Engineer.

<u>907-503.03.7--Opening to Traffic</u>. Delete the first sentence of the first paragraph of Subsection 503.03.7 on page 334, and substitute the following.

The traffic lane shall be opened within 72 hours of concrete placement and may be opened earlier if a 2500 psi compressive strength is obtained and verified by a cylinder break or maturity meter probe. The approval of the Engineer must be obtained prior to opening the lane.

After the third paragraph of Subsection 503.03.7 on page 334, add the following.

If the Contractor has previously developed the strength/maturity relationship for the mixture, an approved maturity meter probe may be used to determine concrete strengths. A maturity meter probe shall be inserted into the last concrete placed that represents the pavement area to be tested. The maximum amount of concrete which may be represented by a maturity meter probe is 50 cubic yards. The pavement may be opened to traffic when maturity meter reading indicates that the required in place strength is obtained.

Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO Designation: T325. Validation of the maturity curves shall be made at least once for every 500 cubic yards produced of each concrete mixture used. Validation of the maturity curve shall be considered acceptable when the results of compressive strength tests are within 10% of the predicted value determined by the maturity curve. If the 10% requirement is not met, the existing maturity curve shall no longer be used and a new maturity curve shall be developed prior to continuing to use the maturity method to estimate the in-place compressive strength.

Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment. Training and maintaining a list of approved maturity technicians shall be the responsibility of the Mississippi Concrete Industries Association.

<u>907-503.05--Basis of Payment</u>. Add the "907" prefix to the first pay item listed in Subsection 503.05 on page 335.